Claim 40 (Twice Amended). The composite chemical barrier fabric of Claim 37, wherein the fabric achieves at least about a 25% improvement in modified ISO 7854 Method B flex crack resistance compared to a fabric without the durability layer.

REMARKS

Status of the Claims

Claims 1-31 and 33-42 are pending. Claims 1, 13, 30, and 37 are amended for clarification purposes. Claims 2, 18, 31, 38, and 40 are amended to correct obvious typographical errors. As stated below, it is well known that thermoplastic polyolefins, TPOs, are known in the art as, and are synonymous to, thermoplastic polyolefin elastomers. This is discussed further below. As such, no other new matter is added with the above amendment.

Examiner Interview

On August 14, 2002, an interview was conducted between Applicant, Applicant's representative, Examiner Guarriello and his Supervisory Patent Examiner, Terrell Morris. The interview was summarized in the Examiner's Interview Summary Form as follows:

> "agreed if elastomer was added to the claims then this would overcome the prior art of record. However, no allowable claims at this point in time."

Additionally, during the interview "TPOs", as understood in the art, were discussed. Applicant supported his position that TPOs are known in the art for their elastomeric qualities with voluminous "hits" from an internet search indicating that TPOs are also known in the art as thermoplastic polyolefin elastomers.

Finally, the three pending rejections were discussed in detail.

The time and attention of Examiner Guarriello and SPE Morris were greatly appreciated.

Issues Under 35 U.S.C. § 112

Claims 1-3, 6-19, and 22-42 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

The Office Action states that "it is still not clear what the components of the specific coating composition comprises which meet the characteristics of ... the claim."

Applicant respectfully disagrees with this assertion. It is clear in the claims that a thermoplastic polyolefin elastomer (TPO) is the coating composition of the instant application.

As stated in the previous response, incorporated herein by reference, the fact that other elements are not further cited in the claim at best, renders the claim "broad", but not indefinite. "Breadth" of a claim cannot, by itself, render a claim indefinite. In re Gardner, 166 U.S.P.Q. 138 (CCPA 1970).

The Office Action further asserts that the instant claims are indefinite for only "setting forth physical characteristics desired in an article, and not setting forth specific compositions which meet such characteristics."

Applicant respectfully traverses this assertion because, as clearly stated in the claim, the specific composition is a thermoplastic polyolefin elastomer.

The Office Action bases the 112, second paragraph rejection, at least in part, on the authority of Ex parte Slob, 157 U.S.P.Q. 172 (Bd. Pat. App. & Inter. 1967). Applicant respectfully submits that the facts of the present case are easily distinguishable from the facts of Ex parte Slob.

In Ex parte Slob, the claim at issue was directed to a detergent composition. The claimed detergent composition comprised a "liquifiable substance" having a liquification temperature of from about 40°C to about 300°C, and being compatible with the ingredients in the powder detergent composition. The Board of Appeals agreed with the Examiner in that this claim language was not sufficiently definite. The reasoning of the Board was that the language purported to cover everything which will perform the desired functions (i.e., liquefy) regardless of its composition, and it appeared to read upon materials that could not possibly be used with the powder detergent composition to accomplish the purposes intended. The Board cited examples of metals and alloys which would have the appropriate melting point, but clearly did not give rise to a suitable preparation for the claimed detergent. Additionally, the Examiner set forth a number of examples that satisfied the claim limitations, but could not be used in detergents. Furthermore, the Board stated that the claim appeared to recite elements for what they do, rather than what they are.

On the other hand, the claims of the present invention are clearly distinguishable from Slob for at least the following reasons:

(1) the claims of the present invention state that the durability barrier layer comprises a thermoplastic polyolefin elastomer (TPO). The claimed thermoplastic polyolefin elastomer is stated more in terms of a composition than being functional (vs. the "liquefiable substance" functional claims rejected by the Board of Appeals in Ex parte Slob);

(2) the claims of the present invention do not cover "anything which will perform the desired results" of, for example, increasing the puncture resistance and flex-crack resistance of a chemical barrier fabric. The claims cover thermoplastic polyolefin elastomers (TPOs) which could yield the desired results. As stated above, at best these claims may be broad, but such is not the standard for definiteness. See the previous response and MPEP § 2173.02 with respect to the "reasonably precise" standard of definiteness;

(3) in Slob, both the Examiner and the Board cited examples of different compounds which could not be used with the detergent compositions in claimed by Slob. Further, the Board stated that the claims were "drawn to all substances which are totally unrelated to those ingredients shown as suitable by appellant and which are merely claimed by the designation of desired properties." Again, while Applicant's claims may be broad, they feature TPO compositions, not "all substances which are totally unrelated...", and

(4) as has been established in the record, TPOs are a relatively new subclass of resins, and comprise two-component elastomer systems. In view of the relative newness of TPOs, and the lack of applicable art, the present invention

has pioneering qualities. As such, Applicant respectfully submits that the claims should be given latitude accordingly. MPEP § 2173.02 states that the definiteness of a claim should be analyzed, *inter alia*, in view of the teachings of the prior art. Additionally, MPEP § 2173.02 states that "[s]ome latitude... should be permitted even though the claim language is not as precise as the examiner might desire."

Therefore, applicant respectfully requests that this rejection be withdrawn.

Issues Under 35 U.S.C. § 102(b)

Claims 1-3, 6-19, 22-24 are rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Langley, U.S. Patent No. 5,948,708. This rejection is respectfully traversed. Reconsideration and withdrawal are requested.

As applicant has previously stated in the record, the cited reference fails to disclose a chemical barrier fabric comprising a thermoplastic polyolefin elastomer (TPO) that the present invention comprises on at least one side of a multiple layer, chemical barrier material.

In other words, the cited reference fails to disclose the elastomeric properties of the TPO layer of the present invention. Please see the previous response (mailed February 4, 2002) for additional comments with respect to this reference.

In view of the differences outlined above, and previously in the record, Applicant respectfully submits that the cited references fails to disclose an identical invention as claimed,

as required under 35 U.S.C. § 102. Richardson v. Suzuki Motor Co., 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

Accordingly, this rejection should be withdrawn.

Claims 1-31 and 33-34 are rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Hauer, et al., U.S. Patent No. 5,626,947. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

This reference has also been previously distinguished in the record. Additionally, this reference fails to disclose or suggest that elastomeric qualities of the thermoplastic polyolefin elastomer (TPO) of the present invention.

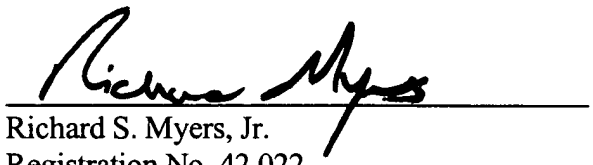
The documentation presented at the interview and in the previous response mailed February 4, 2002 (Attachment A) with respect to TPOs and thermoplastic polyolefin elastomers should assist in clearing up the assertion on page 5, lines 1-6 of the Office Action. That is, it should now be clear that a "TPO" is known in the art as a "thermoplastic polyolefin elastomer." Please see the previous response for further information regarding thermoplastic polyolefin elastomers (TPOs).

Conclusion

From the foregoing, further and favorable reconsideration in the form of a Notice of Allowance is in order and such action is earnestly solicited.

If the Examiner has any questions concerning this Amendment or the Application in general, he is respectfully urged to contact Richard S. Myers, Jr. (Reg. No. 42,022) at the number listed below.

Respectfully submitted,



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Version With Markings to Show Claim Changes Made

Claim 1 (Six Times Amended). A composite chemical barrier fabric having improved durability comprising:

a multiple layer, chemical barrier material having a first side and a second side; and

a durability barrier layer coated on at least one of said first or second side comprising a thermoplastic polyolefin elastomer (TPO) with an inherent bonding affinity to the chemical barrier material, the coated chemical barrier composite achieving at least 25% improvement in ASTM 1342 puncture resistance and at least 25% improvement in modified ISO 7854 Method B flex-crack resistance of the fabric when compared to a fabric not having said durability barrier layer.

Claim 2 (Twice Amended). The composite chemical barrier fabric of claim 1, wherein the multiple layer chemical barrier material contains at least one stratum that comprises a material selected from the group consisting of polyvinylidene [polyvinyidene] chloride, ethylene vinyl acetate, ethylene vinyl alcohol, nylon, polyvinyl alcohol, polyester, polytetrafluoroethylene [polytetraflouroethylene], fluorinated ethylene propylene, polyvinylidene [polyvinyldene] chloride copolymer, acrylic, acrylonitrile copolymer, ionomers, ethylene/methacrylate acid copolymer, polybutylene, metalized polyester, polypropylene, oriented polypropylene, and polyamide.

Claim 13 (Four Times Amended). A composite chemical barrier fabric having improved durability, comprising:

a multiple layer, chemical barrier material having a first side and a second side; and

a durability barrier layer coated on at least one of said first or second side comprising a layer of a thermoplastic polyolefin elastomer [olefin resin] (TPO) having an inherent bonding affinity to the chemical barrier material, the resin having an ASTM D1238 melt flow rate 230/2.16g/10 min of about 0.45; an ASTM D793 density at 23 degrees Celsius g/cm^3 of about 0.88; and an ASTM D1693 environmental stress-cracking resistance, hours of about >3,000.

Claim 18 (Twice Amended). The composite chemical barrier fabric of claim 13, wherein the multiple layer chemical barrier material contains at least one stratum that comprises a material selected from the group consisting of polyvinylidene [polyvinyidene] chloride, ethylene vinyl acetate, ethylene vinyl alcohol, nylon, polyvinyl alcohol, polyester, polytetrafluoroethylene [polytetraflouroethylene], fluorinated ethylene propylene, polyvinylidene [polyvinyldene] chloride copolymer, acrylic, acrylonitrile copolymer, ionomers, ethylene/methacrylate acid copolymer, polybutylene, metalized polyester, polypropylene, oriented polypropylene, and polyamide.

Claim 30 (Twice Amended). A composite chemical barrier fabric having improved durability comprising:

a multiple layer, chemical barrier material having a first side and a second side; and

a durability barrier layer coated on at least one of said first or second side comprising a thermoplastic polyolefin elastomer resin (TPO) having an inherent bonding affinity to the chemical barrier material, the resin having an ASTM D1238 melt flow rate 230/2.16g/10 min of about 0.45.

Claim 31 (Amended). The composite chemical barrier fabric of claim 30, wherein the multiple layer chemical barrier material contains at least one stratum that comprises a material selected from the group consisting of polyvinylidene [polyvinyidene] chloride, ethylene vinyl acetate, ethylene vinyl alcohol, nylon, polyvinyl alcohol, polyester, polytetrafluoroethylene [polytetraflouroethylene], fluorinated ethylene propylene, polyvinylidene [polyvinyldene] chloride copolymer, acrylic, acrylonitrile copolymer, ionomers, ethylene/methacrylate acid copolymer, polybutylene, metalized polyester, polypropylene, oriented polypropylene, and polyamide.

Claim 37 (Four Times Amended). A composite chemical barrier fabric having improved durability, comprising:

a multiple layer, chemical barrier material having a first side and a second side; and

a durability barrier layer coated on at least one of said first or second side comprising a layer of a thermoplastic polyolefin elastomer resin (TPO) having an inherent bonding affinity to the chemical barrier material, the resin having an ASTM D793 density at 23°C g/cm° of about 0.88.

Claim 38 (Amended). The composite chemical barrier fabric of claim 37, wherein the multiple layer chemical barrier material contains at least one stratum that comprises a material selected from the group consisting of polyvinylidene [polyvinyidene] chloride, ethylene vinyl acetate, ethylene vinyl alcohol, nylon, polyvinyl alcohol, polyester, polytetrafluoroethylene [polytetraflouroethylene], fluorinated ethylene propylene, polyvinylidene [polyvinyldene] chloride copolymer, acrylic, acrylonitrile copolymer, ionomers, ethylene/methacrylate acid copolymer, polybutylene, metalized polyester, polypropylene, oriented polypropylene, and polyamide.

Claim 40 (Twice Amended). The composite chemical barrier fabric of Claim 37 [30], wherein the fabric achieves at least about a 25% improvement in modified ISO 7854 Method B flex crack resistance compared to a fabric without the durability layer.